

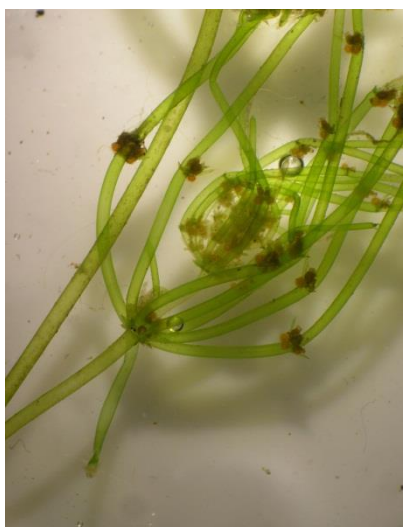
SPECIES INFORMATION SHEET

Chara braunii

English name: Braun's stonewort	Scientific name: <i>Chara braunii</i>	
Taxonomical group: Class: Charophyceae Order: Charales Family: Characeae	Species authority: C. C. Gmel. 1826	
Subspecies, Variations, Synonyms: <i>Chara coronata</i> J.B.Ziz ex G.W.Bischoff 1828	Generation length: 1 (annual)	
Past and current threats (Habitats Directive article 17 codes): Eutrophication (H01.05), Construction (D01, D03, E01, J02.02.02), Water traffic (G01.01.01), Overgrowth of open areas (A04.03, K04.01)	Future threats (Habitats Directive article 17 codes): Eutrophication (H01.05), Construction (D01, D03, E01, J02.02.02), Water traffic (G01.01.01), Overgrowth of open areas (A04.03, K04.01)	
IUCN Criteria: B2ab(iii)	HELCOM Red List Category:	VU Vulnerable
Global / European IUCN Red List Category NE / NE	Habitats Directive: –	
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/NT, Finland Strictly protected status in the Nature Conservation Decree Annex 4/VU, Germany –/–(0, Extinct in freshwaters), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/Red listed as VU, Sweden –/VU		

Distribution and status in the Baltic Sea region

In the Baltic Sea, *C. braunii* has been found from the Gulf of Bothnia and the Gulf of Finland. In Sweden the species is currently known to occur in a few locations in the northernmost Bothnian Bay. In Finland it has been found from the estuaries of the rivers Kiiminkijoki and Kokemäenjoki in the 1980s and 1990s. In the Gulf of Finland the most recent finding is from the period of 1960–1981 from the Russian part of the gulf (Pogrebov & Sagitov 2006). No recent findings have been confirmed from the Finnish coast of the Gulf of Finland. The last records are from the 1940s in Pohja, Pernaja and Porvoo. Anyhow, the species is known from a pond connected to river Porvoonjoki near the coastline. *C. braunii* was included in the previous HELCOM list of threatened and/or declining species (HELCOM 2007).



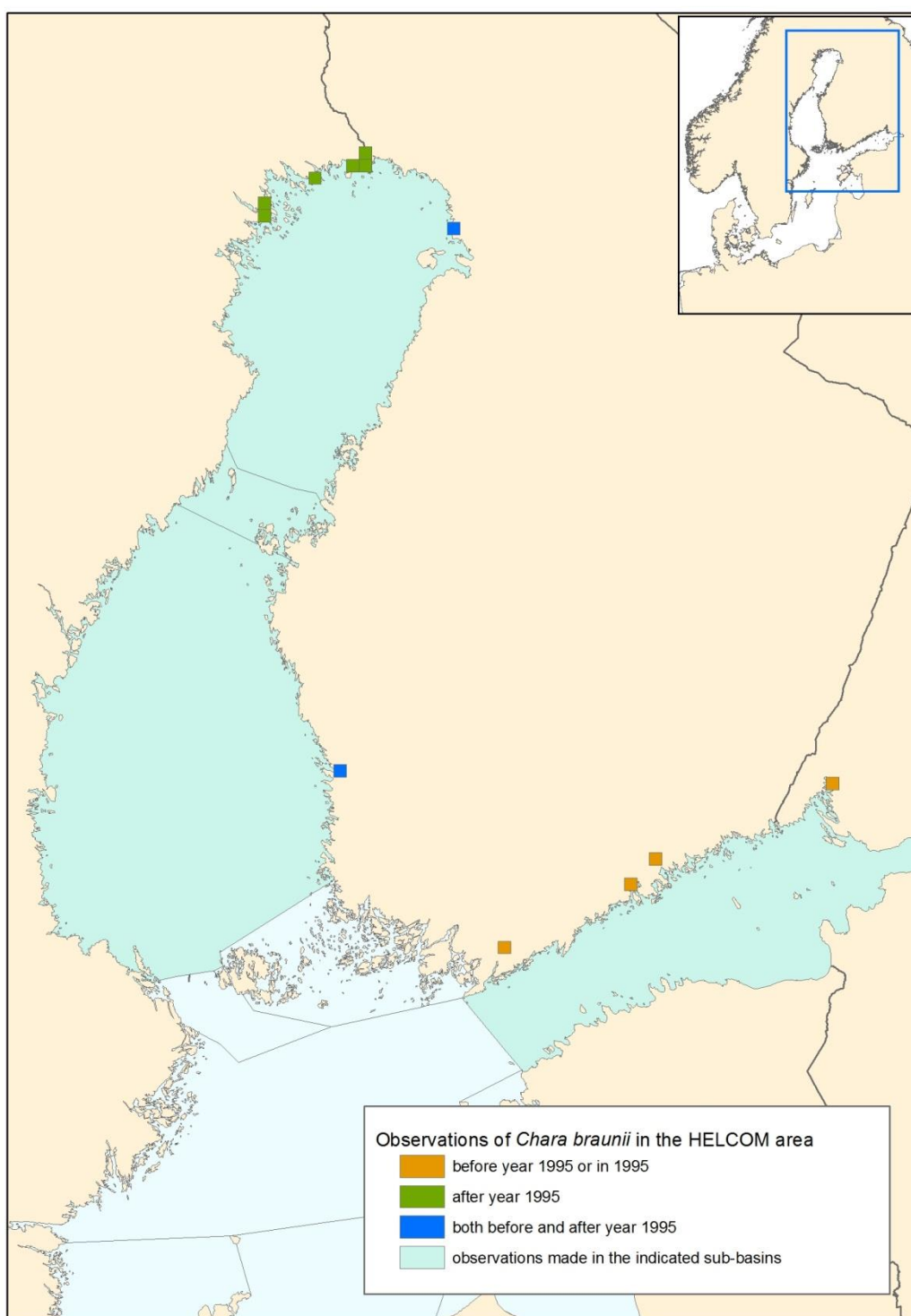
Chara braunii.

Photo by Gustav Johansson,
Hydrophyta Ekologikonsult.

SPECIES INFORMATION SHEET

*Chara braunii***Distribution map**

The records of the species have been compiled from the Finnish Museum of Natural History (Botanical Museum), Swedish Species Gateway (www.artportalen.se) and Russian literature. It should be noted that on the Finnish coast of the Gulf of Finland there are also recent records from Porvoo but those are from a pond connected to the river Porvoonjoki, not from brackish coastal waters of the Baltic Sea (not shown on the map). The species has also other inland occurrences that are not shown on the map.



SPECIES INFORMATION SHEET

Chara braunii

Habitat and ecology

In the Baltic Sea, *C. braunii* is restricted to low salinities of about 0–3 psu. *C. braunii* grows only in shallow and quite sheltered habitats, often inside extensive reed vegetation. Most records are from a depth of 0.1–0.5 m (Zhakova 2003 and references therein).

Description of major threats

The main causes of the decline of charophytes in many regions of the Baltic Sea seem to be eutrophication and habitat destruction. Motor boat traffic has been suggested to affect charophytes by increased turbidity and mechanical damage (Blindow et al. 2003). Competition with other macrophytes and decreasing light conditions restrict the occurrence of the species with increasing depth of water.

Assessment justification

The species is rare and its geographic range is restricted in the form of area of occupancy (AOO). In recent decades *C. braunii* has been found only from a few locations in the Gulf of Bothnia and in the period of 1960–80s from one location in the Gulf of Finland. In 1940s several more locations were known along the Finnish coast. The overall number of locations is estimated to be 6–10. The population has declined considerably from the 1940s and it is assumed that the decline still continues due to e.g. adverse effects of eutrophication on the quantity and/or quality of the habitat. The species meets the criteria B2ab(iii) under VU. The AOO calculated on the basis of known occurrences in the Baltic Sea would even indicate EN.

Recommendations for actions to conserve the species

Mitigation of eutrophication by controlling local sources of nutrient run-off. Conservation measures such as restrictions on coastal constructions and dredging in shallow coastal lagoons and archipelago areas.

Common names

Denmark: –, Estonia: kroonjas mändvetikas, Finland: silonäkinparta, Germany: –, Latvia: –, Lithuania: brauno maurabragis, Poland: ramienica wieńcowa, Russia: Xapa Брайна, Sweden: svedsträffe.

References

- Blindow, I. 1998. *Chara braunii* barklöst sträffe. Artfaktablad. Artdatabanken. Available at: http://www.artfakta.se/Artfaktablad/Chara_Braunii_324.pdf
- Blindow, I., Garbiel, A., Munsterhjelm, R., Nielsen, R. 2003. Conservation and treatse – Proposal of a Red Data Book for charophytes in the Baltic Sea. In Schubert, H., Blindow, I. (eds.), Charophytes of the Baltic Sea, Koeltz Scientific, Koeninsein/Taunus. P. 251–259.
- Estonian Red List of Threatened Species (2008). Available at <http://elurikkus.ut.ee/prmt.php?lang=eng>.
- Johansson, G., Aronsson, M., Bengtsson, R., Carlson, L., Kahlert, M., Kautsky, L., Kyrkander, T., Wallentinus, I. & Willén, E. (2010). Alger – Algae. Nostocophyceae, Phaeophyceae, Rhodophyta & Chlorophyta. In Gärdenfors, U. (ed.) Rödlistade arter i Sverige 2010 – The 2010 Red List of Swedish Species. ArtDatabanken, SLU, Uppsala. P. 223–229. Red List categories available also at <http://www.artfakta.se/GetSpecies.aspx?SearchType=Advanced>
- Koistinen, M. 2010. Näkinpartaislevät, Stoneworts, Characeae. In: Rassi, P., Hyvärinen, E., Juslén, A., Mannerkoski, I. (eds.). Suomen lajien uhanalaisuus – Punainen kirja 2010, The Red List of Finnish Species. Ministry of the Environment & Finnish Environment Institute. P. 204–207.
- Langangen, A., Koistinen, M. ja Blindow, I., 2002. The charophytes of Finland. Memoranda Societatis pro Fauna et Flora Fennica 78: 17–48.
- Martin, G. 2009. *Chara braunii* (C. C. Gmel. 1826) (Charophyta). HELCOM Fact sheets on threatened and/or declining species and biotopes/habitats.
- Pogrebov, V. & Sagitov, R. 2006. Nature Conservation Atlas of the Russian Part of the Gulf of Finland. Swedish Species Gateway. Swedish Species Information Centre and Swedish Environmental Protection



SPECIES INFORMATION SHEET

Chara braunii

Agency. Available at www.artportalen.se.

Zhakova, L. V. 2003. *Chara braunii* C. C. Gmel. 1826. In Schubert, H., Blindow, I. (eds.), Charophytes of the Baltic Sea, Koeltz Scientific, Koenigstein/Taunus. P. 131–141.